A new bolboceratine species from Angola (Coleoptera: Geotrupidae)

by

J. KRIKKEN

Rijksmuseum van Natuurlijke Historie, Leiden

ABSTRACT. — Mimobolbus angolensis sp. nov. is described, illustrated, and compared with M. ornatellus (Péringuey).

Until quite recently the Bolboceratini (sensu Howden & Martinez, 1963) of Africa south of the Sahara were all placed in *Bolboceras* Kirby. Even Paulian (1941) in his revision left all the species of this evidently composite group in *Bolboceras*. The introduction of new genusgroup taxa became inevitable after Cartwright (1953: 101) had pointed out that the application of the name *Bolboceras* needed revision. This was set forth by Vulcano, Martinez & Pereira (1969), who proposed five new genera, including 10 of the ca. 70 tropical African species recognized. Meanwhile, ca. 50 species mentioned by Paulian (1941), as well as recent additions, continue as *Bolboceras* (although they are not at all directly allied with the type-species). As a result of my attempts to rectify this situation, interesting new material is turning up. This will be dealt with occasionally, anticipating synoptic work on the African fauna. The present new species is closely allied with the type-species of its genus, *Mimobolbus ornatellus* (Péringuey). In passing, it should be noted that the limits of this genus as originally given by Vulcano et al. (1969) certainly need to be reconsidered.

Key to *Mimobolbus ornatellus* and related forms (clypeofrontal ridge reaching genae; frontal elevation present, simple or bituberculate medially):

- 1. With distinct black marking(s) on thorax 2

- Frontal elevation simple. Pronotal apex with large impression. Black marking restricted to pronotal disc. Punctures of elytral striae feebly infuscated. Dorsum largely orange with black markings. Large (length ca. 9 mm).— Rhodesia; West Africa, Ethiopia . ornatellus.

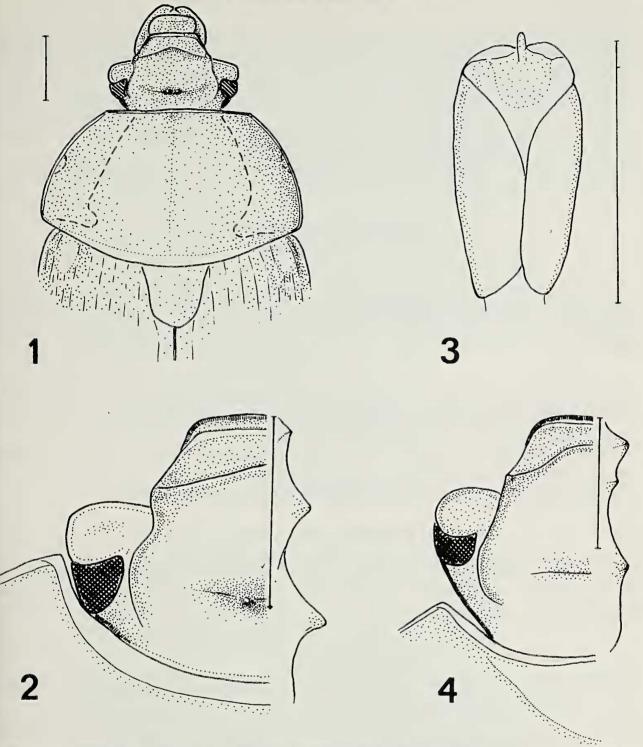
Mimobolbus angolensis sp.nov.

(figs. 1-3)

Description (holotype, male).—Approximate length 6, width 4, height 3.5 mm. Head, median zone of pronotum, entire scutellum, lateral foveole of pronotum, punctures of elytral striae, black; remaining parts of dorsum yellow; legs and underside light brown; generally shiny; pilosity pale-yellow. Habitus globuliform; fore-body as in fig. 1.

Labrum straight in front, sides rounded, surface with transverse ridge. Cephalic contours, disposition of elevations, as in fig. 2. Clypeus and surface between eye-canthi abundantly punctate, primary punctures sparse, secondary punctures (\times 50) numerous; clypeal margin carinate; clypeofrontal carina well developed. Frons with median pair of low tubercles; punctures sparse close to tubercles, abundant in front of common swelling. Vertex with fine primary punctures only (\times 50). Eye-canthus marginate, punctation like that of frons. Maximum length of head (mouthparts excluded) 1.30, maximum width 2.20 mm; ratio 0.59.

Pronotal contours and colour pattern as in fig. 1. Pronotum strongly convex; anterior declivity slightly impressed immediately behind apex; disc with very feebly impressed midline; anterolateral angles ca. 100°; base immarginate, though paralleled by series of punctures.



Figs. 1-3. *Mimobolbus angolensis*, holotype. 1, forebody (inside dashes on pronotum, black); 2, head, enlarged, with profile line; 3, phallus, dorsal. Fig. 4. *Mimobolbus ornatellus*, holotype, head. Scale lines = 1 mm.

Pronotal punctation double (\times 50); secondary punctures almost indistinguishable; primary punctures abundant on disc, their densities 10-12/0.25 sq.mm, diameters ca. 0.08 mm; densities decreasing laterad. Median length of pronotum 2.60, maximum width 4.10 mm; ratio 1/w 0.64. Scutellum (fig. 1) wide, with sinuate sides; derm with dense double punctation (\times 50), primary punctures small.

Elytron strongly convex; marginal gutter sharply separated from lateral declivity; apical section of epipleural edge distinctly sinuate, apicosutural angle denticulate; juxtasutural punctation fine. Discal striae finely impressed with dense, evenly spaced punctation; punctures black, well defined, isodiametric, deep their diameters ca. 0.05 mm; separated by less than their own diameters; slightly affecting interstriae, though peripunctural impression not developed. Discal interstriae slightly convex, lacking distinct punctation (\times 50). Length of elytra (to base of scutellum) 2.20, maximum width combined 4.20; ratio 1/w 0.52.

Sides of pectus vertucose-setose. Fore tibia with 7 + (1) external denticles, their size decreasing proximad; both sides with usual rows of setae; terminal spur long, reaching halfway tarsal segment 3, sides subparallel, apex rounded. Femora all without notable details. Middle and hind tibiae each with one spinose fossorial elevation with angulate-bidentate crest; number of fossorial spines on elevation ca. 5 + 5, superior spines longer; inferior and superior side with usual rows of long setae; terminal spurs of middle and hind tibiae tapering, with rounded apex, distally curved. Phallus as in fig. 3. — Identification, see key.

Material examined. — Holotype male, from Bailundo (= Texeira da Silva), Angola (Zoologische Staatssammlung, Munich).

Mimobolbus ornatellus (Péringuey)

(fig. 4)

Bolboceras ornatellum Péringuey, 1901: 480 (in key), 490 (diagnosis, type-loc. Salisbury). Paulian, 1941: 12 (in key), 40 (diagnosis), 41 (records), fig. 67 (head). — Mimobolbus ornatellus; Vulcano, Martinez & Pereira, 1969: 166 (type-sp. of Mimobolbus), 167 (in key), figs. 2, 4, 4a, 6, 7, (details).

Notes. — Paulian, suggesting a wide distribution for this species, unfortunately gave no pertinent localities. His fig. 67 does not agree with my fig. 4, based on the type, and therefore it seems possible that Paulian's material was heterogeneous.

Material examined. --- 5 specimens: holotype (South African Museum, Cape Town), and four other specimens, also from Rhodesia, on loan from Bulawayo museum.

Rhodesia: Bulawayo; Salisbury; Umtali. Months I, II, XII. Ecology unknown.

ACKNOWLEDGEMENTS

For the loan of specimens I am indebted to: the Zoologische Staatssammlung, Munich (H. Freude); South African Museum, Cape Town (V.B. Whitehead); National Museum, Bulawayo (F.C. de Moor).

REFERENCES

Cartwright, O.L., 1953. Scarabaeid beetles of the genus Bradycinetulus and closely related genera in the United States. - Proc. U.S. nat. Mus. 103: 95-120, figs. 14-16, pl. 3.

Howden, H.F. & A. Martinez, 1963. The new tribe Athyreini and its included genera (Coleoptera: Scarabaeidae, Geotrupinae). - Can. Entomologist, 95: 345-352, figs. 1-19.

Paulian, R., 1941. Coprophaga Africana: Deuxième noto. Revision des Bolboceras africains. -Rev. Zool. Bot. afr. 35: 1-71, pls. 1-8.

Péringuey, L., 1901-1903. Descriptive catalogue of the Coleoptera of South Africa (Lucanidae and Scarabaeidae). - Trans. South Afr. philos. Soc. 12: 1-920, pls. 31-42.

Vulcano, M. A., Martinez, A., Pereira, F. S., 1969. Notes on African Bolboceratini (Coleoptera, Geotrupidae). - Papéis Avulsos Zool. 22: 159-174, figs. 1-13.

Postbus 9517, 2300 RA Leiden, the Netherlands.

MEDEDELING VAN DE BIBLIOTHECARIS. Wegens externe prijsverhogingen is de bibliotheek genoodzaakt om met ingang van 1 januari 1977 de prijzen van de fotocopieën met 1 cent te verhogen, tot 16 cent voor copieën die door de gebruiker zelf worden gemaakt, resp. 21 cent voor copieën die door de bibliotheek in opdracht worden vervaardigd.

Voor de goede orde wijs ik er nog op dat sinds enige tijd het B.T.W. tarief waaronder fotocopieën vallen van 16% naar 18% is verhoogd. - W. N. Ellis